As an amateur radio operator and shortwave listener, I make the following comments to ET docket 04-37.

I agree with the Commission's stated goal of bringing Internet services to as many Americans as possible. However, I believe that The American Radio Relay League and others have presented substantial and credible evidence that Access BPL will make the high frequency (HF) bands unusable for other services. Although the FCC believes that interference mitigation technologies exist to address this issue, dealing with interference issues on a case by case basis is impractical (see below). I view the RF spectrum as a precious natural resource, while others, perhaps including the Commission, view it as an expendable commodity. It appears as though the FCC would like to implement Access BPL before many of the questions regarding interference have been answered. That's unfortunate, since several organizations are now in various stages of determining just how much of the problem Access BPL will be for HF users. I guess the FCC will deal with any mess posed by Access BPL at a later time.

Although interference to the Amateur Radio Service has been the focus of many comments about BPL, interference with current shortwave services in the HF bands is another important issue. Many people like me, gather free news and opinions from shortwave listening. Much of the information and opinions expressed on world service shortwave stations is not available on the Internet in that format. Access to these opinions and attitudes is extremely valuable information, offering a perspective on current events not available elsewhere. Access to inexpensive shortwave receivers and lack of governmental controls on shortwave listening has always been a major freedom in the United States of America. As a signature of the International Telecommunications Union, I believe the United States as affirmed a policy that restricts governmental interference to shortwave frequencies, specifically those between 2 and 30 megahertz. I think that there is adequate information and data at the present time to strongly suggest that Access BPL violates this policy.

I applaud the Commission for proposing emission limits as part of access BPL implementation, but as pointed out by many comments in the Initial Proposal for Rulemaking, Part 15 standards are not appropriate for Access BPL. Part 15 is best reserved for those consumer products that only sporadically interfere with licensed services. Although the Commission rushed ahead with this proposal before adequate data on interference could be collected and analyzed, it appears from initial data that the interference caused to the Amateur Radio and shortwave services by access BPL is strong, broad banded, persistent, and expected across major portions of the HF and VHF bands. This is not true of a hairdryer or garage door opener, devices for which Part 15 was originally intended. For the Commission to employ Part 15 as a major protection again harmful interference to licensed users, indicates that the FCC is not willing to do its homework. Access BPL represents such a radical departure from the

usual FCC approved device, that it should have its own Part 15 equivalent, complete with emissions standards based on data collected from scientific studies. As it is, the FCC took the easy way out. The other issue is whether consumers will understand that their BPL service is subject to possible interruptions if their service interferes with a licensed service? The FCC should make the providers of BPL explain to consumers the Part 15 implications and how it might impact their Internet service. This should be detailed in the contract.

The Commission also states that the access BPL providers would have "strong incentive to exercise the utmost caution in installing their systems to avoid harmful interference" because of the significant investment in service deployment. That reason presupposes that providers would incur significant economic penalties if their signals caused harmful interference and they refused to cease operations or implement interference mitigation technologies. What penalties are proposed? I see no penalties specified in this proposal. Without significant criminal and economic penalties, the expectation that providers would avoid harmful interference is laughable; providers would ignore local licensed services and continue operations with a minimal or half-hearted effort to limit interference. Many Amateur Radio operators have had experience working with their local power company on some interference issue. Although experiences vary, power companies have not been responsive or helpful in many cases. If the Commission truly expects compliance to interference standards, then it should specify significant penalties for noncompliance. I suggest the standard $10,000 per day for noncompliance. Another way to help insure compliance is to have each Access BPL system certified as "compliant" by an independent auditor. The auditor (company) would make appropriate measurements, certify the system as "clean" and report the certification process to the FCC. Periodic audits should be required to insure continued compliance. These data should be kept up-to-date by the FCC and made available to the public. Without these safeguards, the Commission's expectation that BPL providers will work to avoid local interference is a joke.

The other issue that should be clarified is how the Access BPL provider would implement interference avoidance technology. The FCC apparently expects the BPL provider to change frequencies or reduce power in certain areas when BPL causes significant interference. Let's take a typical situation: I am home on a weekday afternoon and decide to work the amateur 40, 30, 20 and 15 meter bands. I immediately experience significant interference from BPL. I, the licensed user, must contact the BPL provider in my area and "request" interference avoidance. Why should I have to request interference mitigation from a non-licensed entity? That's wrong. What happens if the BPL provider fails to comply or the system change does not reduce interference to my satisfaction? What recourse do I have? Suppose it takes the BPL provider several hours to make the change. Is that acceptable? The FCC needs to be

specific about these issues, which will immediately present themselves after BPL implementation. One possible solution is for the FCC to set up a website or a telephone number for licensed user complaints of the type described above. These complaints would be investigated and fines levied if the BPL provider is found noncompliant. Noncompliance would immediate trigger an audit of the type described above. This makes the FCC the arbiter of disputes between licensed users and BPL providers. It also establishes a huge and costly bureaucracy to manage complaints, but if the FCC wants BPL under the present conditions, I see no alternative.

The other issue of concern is the potential for interference to Access BPL by amateur transmissions. Does the FCC know enough about BPL to insure that amateurs will not cause significant and unavoidable interference to BPL? I assume that the potential for interference to BPL would depend on multiple operational factors, including the frequencies, power levels and modulation type employed. Who will serve as arbiter in disputes arising from such interference? What happens if I interfere with my neighbor's BPL connection? Will he have recourse against me? Will the FCC arbitrate these disputes? Will certain times of operation be established for his or my activities to avoid potential conflict? The FCC should possess data on the potential for other services to interfere with BPL. These data should be collected and analyzed before BPL is implemented to any significant extent in the country.

In summary, I oppose Access BPL, not because I oppose expanded Internet access, but rather because I view BPL as a polluting technology, a technology that will pollute the precious natural resource of the RF spectrum. Access BPL is like drilling for oil on the pristine waters of an Alaskan lake. It is especially worrisome that the present FCC, a non-elected regulatory commission, can approve this problematic technology in spite of thousands of critical comments and technical objections submitted to date. There are alternative technologies available to expand Internet access and there is no need for Access BPL at this time. Implementation of this technology will cause more problems than it solves.

Action Points:

1. Collect sufficient scientific data to allow intelligent and informed standards of rf radiation from BPL devices.
2. Establish a mandatory certification procedure for Access BPL systems to ensure that they are in compliance with radiation standards.
3. Develop an independent auditor process to certify BPL systems.
4. Establish substantial fines and penalties for RF radiation rule infractions and establish procedures to make BPL systems responsible for
5. Specify procedures to formally lodge complaints against BPL providers and establish a mechanism to follow complaints to ensure that they are satisfactorily addressed. Specify time limits of BPL compliance.

6. Make it mandatory for BPL providers to inform customers of their secondary status as BPL subscribers, making them aware of the interference issues and what it might mean for data service.